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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,272	10/17/2003	Nam-Kcun Kim	11281-014-999	1815
20583	7590	10/31/2006	EXAMINER	
JONES DAY 222 EAST 41ST ST NEW YORK, NY 10017			WHISENANT, ETHAN C	
			ART UNIT	PAPER NUMBER
			1634	

DATE MAILED: 10/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action  
Before the Filing of an Appeal Brief**

Application No.

10/688,272

Applicant(s)

KIM ET AL.

Examiner

Ethan Whisenant, Ph.D.

Art Unit

1634

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 28 September 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.  
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☒ The amendments are not in compliance with 37 CFR 1.121. \_\_\_\_\_  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: 10-11.  
Claim(s) rejected: 1-9.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☐ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: \_\_\_\_\_.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.

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### **Advisory Action**

1. The applicant's After Final Response to has been received and considered. The applicant's response was filed on 28 SEPT 06. The amendment will not be entered because it is improper in light of 37 CFR 1.121 or 1.4.

#### **CLAIM AMENDMENTS NOT REFLECTED IN THE LISTING OF THE CLAIMS**

2. **There are significant amendments to the claims in the response After Final and the listing of the Claims do not reflect this fact.** For example, recited below is the Claim 1 that was searched and considered by the examiner at the time of the Final Action. Below that is a copy of Claim 1 as recited in the response After Final filed 28 SEPT 06. **Please check that all amendments to all the claims are reflected in the Listing of the Claims.**

Finally, note that in the Listing of the Claims searched and considered by the examiner at the time of the Final Action, Claims 12-16 were canceled. Now, however, the Listing of the Claims in the response After Final filed on 28 SEPT 06 recite Claims 13-18. Please clarify.

**Claim 1 in the amendment filed 12 APR 06**

1. (Currently amended) A method for detecting a mutation, comprising: a) amplifying a target polynucleotide using a forward primer and a reverse primer to produce an amplified target polynucleotide; b) contacting said amplified target polynucleotide with two or more restriction endonucleases to generate at least one restriction fragment, said restriction fragment comprising two single-stranded fragments of 2-32 nucleotides each, wherein ~~at least one~~ both of said single-stranded ~~fragment~~ fragments contains [ [a] ] at least one mutation sequence, said mutation sequence being a base substitution, deletion or insertion; [ [and] ] c) measuring the molecular weights of said single-stranded fragments, and d) comparing said molecular weights of said single-stranded fragments to the molecular weights of control fragments, wherein if said molecular weights of said single-stranded fragments differs from the molecular weights of said control fragments, said mutation is detected.

**Claim 1 in the response After Final filed 12 APR 06**

A method for detecting a mutation, comprising:

- a) amplifying a target polynucleotide using a forward primer and a reverse primer;
- b) generating fragments of two or more single-stranded polynucleotides including one or more mutation sequences having the size of 2-32 bases by cleaving the amplified polynucleotide with restriction enzymes; and
- c) measuring the molecular weight of the cleaved fragments.

### CONCLUSION

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ethan Whisenant, Ph.D. whose telephone number is (571) 272-0754. The examiner can normally be reached Monday-Friday from 8:30AM - 5:30PM EST or any time via voice mail. If repeated attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ram Shukla, can be reached at (571) 272-0735.

The Central Fax number for the USPTO is (571) 273-8300. Please note that the faxing of papers must conform with the Notice to Comply published in the Official Gazette, 1096 OG 30 (November 15, 1989).



**ETHAN WHISENANT**  
**PRIMARY EXAMINER**  
Art Unit 1634